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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,634	09/29/2004	Xianzhong Chen	04-2-406	5633

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OSRAM SYLVANIA INC
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EXAMINER

WON, BUMSUK

ART UNIT PAPER NUMBER

2879

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/711,634	Applicant(s) CHEN, XIANZHONG	
	Examiner Bumsuk Won	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/29/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/29/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

- 1 Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-4 and 8-12, drawn to a phosphor for an EL lamp, classified in class 313, subclass 485.
 - II. Claims 5-7, drawn to method of making a phosphor for an EL lamp, classified in class 445, subclass 24.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case as opposed to suspending powdered materials in resinous materials and then applying the materials in layers onto a plastic film, phosphor can be made using vapor deposition technique.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Robert Clark on 10/3/2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-4 and 8-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-7 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

2 The term "about" in claims 9-12 are a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Appropriate correction is required.

Claim Objections

3 Claim 12 is objected to because of the following informalities: The term "1500" does not have units. Examining will be done assuming "1500" is "1500 hours". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4 Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US 2003/0197460) which is Applicant's admitted prior art.

Regarding claim 1, Lee discloses a single-component, yellow-emitting electroluminescent (paragraph 3, lines 1-3) having an emission having an x color coordinate from 0.420 and 0.500 and y color coordinate from 0.420 and 0.460 when stimulated by an electric field (paragraph 11, lines 3-5).

Regarding claim 2, Lee discloses the emission has an x color coordinate of between 0.450 and 0.500 and a y color coordinate from 0.440 to 0.460 (paragraph 11, lines 3-5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5 Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2003/0197460) in view of Hampden-Smith (US 6,153,123).

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Regarding claim 3, Lee discloses all of the claimed limitations except for the phosphor has a composition represented by ZnS:Cu, Cl, Mn.

Hampden-Smith discloses the phosphor has a composition represented by ZnS:Cu, Cl, Mn (column 35, lines 65-67, column 36, lines 1-6), for the purpose of emitting light (column 35, lines 34-36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the phosphor to have a composition represented by ZnS:Cu, Cl, Mn disclosed by Lee *HW 10/16/05* in the phosphor disclosed by ~~Hampden-Smith~~, for the purpose of emitting light.

Regarding claim 4, Hampden-Smith discloses the phosphor additionally contains a metal selected from gold and antimony (column 35, lines 65-67, column 36, lines 1-6).

The reason for combining is the same as for claim 3 above.

6 Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 2003/0197460) in view of Huber (US 2005/0001533).

Regarding claim 8, Lee discloses a single-component, yellow-emitting electroluminescent (paragraph 3, lines 1-3) having an emission having an x color coordinate from 0.420 and 0.500 and y color coordinate from 0.420 and 0.460 when stimulated by an electric field (paragraph 11, lines 3-5).

Lee does not disclose an electroluminescent lamp including a single-component, yellow-emitting electroluminescent phosphor.

Huber disclose an electroluminescent lamp including a single-component, yellow-emitting electroluminescent phosphor (paragraph 5, lines 1-6), for the purpose of having a lower locus shift during its operating life (paragraph 5, lines 6-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an electroluminescent lamp including a single-component, yellow-emitting electroluminescent phosphor disclosed by Huber in an electroluminescent lamp disclosed by Lee, for the purpose of having a lower locus shift during its operating life.

Regarding claim 9, Lee in view of Huber does not disclose the lamp has an initial brightness of at least about 6 foot-Lamberts (ft-L) when operated in a 50% relative humidity (R.H.) and 70°F environment. However, the initial brightness of at least about 6 foot-Lamberts (ft-L) when operated in a 50% relative humidity (R.H.) and 70°F environment does not have a patentable weight since it is operational limitation and does not affect the structural limitation of the claim.

Regarding claim 10, Lee in view of Huber does not disclose the lamp has an initial brightness of at least about 8 ft-L when operated at 100V and 400 Hz in a 50% relative humidity (R.H.) and 70°F environment. However, the initial brightness of at least about 8 ft-L when operated at 100V and 400 Hz in a 50% relative humidity (R.H.) and 70°F environment does not have a patentable weight since it is operational limitation and does not affect the structural limitation of the claim.

Regarding claim 11, Lee in view of Huber does not disclose the lamp exhibits a half-life of at least about 1000 hours. However, the exhibition of a half-life of at least about 1000 hours does not have a patentable weight since it is operational limitation and does not affect the structural limitation of the claim.

Regarding claim 12, Lee in view of Huber does not disclose the lamp exhibits a half-life at least about 1500 hours. However, the exhibition of a half-life of at least about 1500 hours does not have a patentable weight since it is operational limitation and does not affect the structural limitation of the claim.

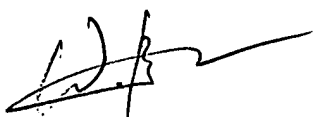
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bumsuk Won whose telephone number is 571-272-2713. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bumsuk Won
Patent Examiner


JOSEPH WILLIAMS
PRIMARY EXAMINER